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May 18, 2007

REQUEST FOR QUALIFICATIONS

ENGINEERING DESIGN AND CONSTRUCTION SERVICES ACKLEY LAKE DAM, MONTANA

INTRODUCTION

The Montana Department of Natural Resources and Conservation (DNRC) is seeking engineering firms qualified to perform engineering design and construction management for rehabilitation of Ackley Lake Dam. Ackley Lake Dam is located in Judith Basin County, Montana. The work will consist of reviewing the feasibility study completed by DNRC for technical adequacy and preferred design components, preparation of the final design and construction documents, and, providing construction management services for selected rehabilitation components. This work is being conducted to bring the dam into compliance with the State of Montana Dam Safety Act. DNRC is soliciting and will evaluate Statements of Qualifications (SOQ's) from engineering firms desiring to be considered for this project. **This is not a Request for Proposals.** The work must be done by Consultant under the direction of a professional engineer licensed in the State of Montana.

BACKGROUND

Ackley Lake Reservoir is located approximately 10 miles southwest of Hobson, Montana. It is owned by the State of Montana, Department of Natural Resources and Conservation, with daily operations and maintenance the responsibility of the Ackley Lake Water Users Association. The State Water Conservation Board constructed the dam and canal system in 1938. Water from the reservoir is used for irrigation, recreation and the regulation of stream flows. It is an off-stream reservoir that obtains water from the Judith River. The reservoir storage capacity at the spillway crest elevation is 5,815 acre-feet and the surface area at normal full pool is 260 acres. The drainage area covers 2.6 square miles. The dam's height is 55 feet with a crest width of 25 feet and crest length of 3,500 feet. The dam is classified as high hazard under the Montana Dam Safety Act guidelines.

The dam is an earth fill structure constructed with low permeable clayey soil in upstream and central zones and permeable fill in the downstream zone. The foundation beneath the dam's maximum section is shale; two discreet thin shale layers are fractured and transmit water. The dam's abutments are composed of shale, clay, sand and some gravel.

Ackley Dam Engineering Services RFQ

Page 1 of 5

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WATER RIGHTS
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(406) 444-6610

Monitoring at the site has determined that there is relatively high artesian pressure in the fractured shale layers at the dam's toe that result in a low factor of safety with respect to uplift. In 1959 work was completed to mitigate a slide in the dam's toe area thought to be caused by the artesian pressure. The project is currently operating with a reservoir restriction (approx. 5 feet below normal full pool) to reduce the foundation pressure.

The DNRC is also concerned that the original toe drains and outlet conduit may be nearing the end of their design life. These are corrugated metal pipes with galvanized and tar coatings for corrosion protection. The outlet pipe from for the toe drain was partially excavated in 1997 and was found to be severely corroded.

A feasibility study was completed by the DNRC in 2006. The preferred components for rehabilitation included: 1) installing a drain system in the toe area to reduce foundation pressure; 2) constructing a toe berm as an additional measure for counteracting foundation pressure; 3) installing interceptor drains that tie into and stabilize the existing toe drain system; 4) installing a new toe drain system beneath the toe berm, and; 5) replacing the outlet conduit. Other components that were not selected but may also be advantageous included: 1) installing an upstream cutoff to impede water flow through the fractured shale zones, and; 2) rehabilitating the outlet conduit using a cured-in-place pipe product in lieu of excavating and replacing it.

SCOPE OF WORK

DNRC is requesting professional engineering services to assist in the rehabilitation work for Ackley Lake Dam. Statements of Qualifications are being solicited from firms capable of performing the following work.

1. Review the feasibility study for completeness and provide concurrence to the DNRC on their preferred rehabilitation plan. If there is non-concurrence, provide alternative(s) for incorporation into the preferred rehabilitation plan.
2. Complete a groundwater modeling study, if needed, to evaluate the effectiveness of an upstream cutoff.
3. Evaluate the constructability and cost-effectiveness for rehabilitating the outlet conduit using a cured-in-place pipe.
4. Prepare a final design. Design components may include rehabilitation/ replacement of the outlet conduit, rehabilitation of the existing toe drain, construction of depressurization drains, construction of a new toe drain, construction of a toe berm, and incorporation of instrumentation and/or monitoring features.
5. Prepare a contract document (plans and specifications) for completing the rehabilitation.
6. Provide consultant services for construction inspection and contract administration.

The total project budget for engineering services to complete this work is approximately \$230,000.

SCHEDULE AND DEADLINE

DNRC desires that the construction be bid by March 30, 2008 and under contract by May 15, 2008. Construction would be completed during the Fall 2008 and Winter 2008/2009.

QUALIFICATIONS

Firms desiring to be considered for the work should deliver to DNRC **five bound copies** of the information requested below not later than **5:00 p.m., local time, Thursday, June 7, 2007**. The SOQ's must be in DNRC's possession by this time, **not** postmarked, and must include the following information.

1. *Overall experience of the project team.* Include completed Federal Form 330. Limit the number of projects in each section of SF 330 to a maximum of 10.
2. *Specialized experience.* Describe specialized experience as it relates to performing a feasibility study, design and construction for conduits and drains, particularly as it relates to earthen embankments and dams. At a minimum, the discussion should demonstrate experience necessary to complete the tasks identified in the "Scope of Work" section. Please limit this to no more than 10 pages.
3. *Office location(s).* Indicate the location of the office(s) from which the work would be performed. If work would be shared between main and branch offices at different locations, indicate office locations and what work would be directed or performed from each office. Where a main office and branch office(s) would be involved, include the appropriate information on Federal Form 330 for each.
4. *Organization Chart.* Show proposed relationships among key personnel, support staff, and any subcontractors who would participate, identifying which aspects of work each person would perform. Work assignments should correspond to work described in the "Scope of Work" section plus additional items identified by the Consultant.
5. *Resumes.* Provide resumes for each employee shown on the organization chart who will perform the work and the supervisory personnel who will be responsible for the work proposed. Include education, professional or technical certifications or licenses, and work history relevant to each person's job assignment on this project. Again, if a main and a branch office would be involved, please identify the offices from which the employees would work. Individual resumes must be limited to no more than four pages each.
6. *Workloads.* Provide information regarding current and projected workloads of the firm or firms involved.
7. *Subcontractors.* Clearly identify any subcontractors and provide general information, resumes, specific qualifications, and the appropriate information from Federal Form 330 for each.

The DNRC may request additional information, clarification, or references at its discretion.

EVALUATION CRITERIA

DNRC will use the following evaluation criteria (listed with scoring points) to rate firms responding to this request. The criteria will be applied in evaluating the project team identified to work on the project.

1. Overall consultant/subconsultant experience, as it relates to the design and rehabilitation of earth dams, in particular as it relates to the Scope of Work. (25 points)
2. Recent technical experience of consultant/subconsultant as it relates to feasibility studies, design, and rehabilitation of earth dams. (10 points)
3. Overall qualifications and experience of the consultant/subconsultant, to be assigned to the project. (15 points)
4. Personnel experience with design, construction and rehabilitation of buried piping, including outlet conduits for earth dams. (10 points)
5. Personnel experience with seepage issues and mitigation measures for embankment, including earth dams (10 points).
6. Personnel experience with groundwater modeling for confined aquifer systems. (5 points)
7. Capacity to meet time and project budget requirements. The firm must show that they have the resources to complete all phases in a timely and efficient manner. Include a description of present and projected workloads. (15 points)
8. Past experience with the DNRC and/or other public agencies. (5 points)
9. Location of the firm and personnel to complete the work. (5 points)

GENERAL

The work on this project must be done under the direction of a professional engineer licensed in the State of Montana with specific experience in earthen dam design, rehabilitation and construction.

THIS IS NOT A REQUEST FOR PROPOSALS. Proposals will be requested based on evaluation of the SOQ's received.

SELECTION PROCESS

All complete SOQ's received will be reviewed and evaluated by a team of State Water Projects Bureau personnel. Based on DNRC's rating of firms responding to this request, DNRC will request proposals from one or more firms.

DNRC reserves the right to modify the Scope of Work listed in this RFQ based upon the availability of DNRC staff to perform Project tasks.

QUESTIONS AND SUBMITTALS

Please address questions and Statements of Qualifications to:

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State Water Projects Bureau
Department of Natural Resources and Conservation
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PO Box 201601
Helena, Montana 59620-1601

Phone: (406) 444-5709

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RECEIPT OF STATEMENT OF QUALIFICATIONS AND PUBLIC INSPECTION

Public Information

All information received in response to this Request for Qualifications (RFQ), including copyrighted material, is deemed public information and will be made available for public viewing and copying shortly after the time for receipt of SOQ's has passed with the following four exceptions: (1) bona fide trade secrets meeting the requirements of the Uniform Trade Secrets Act, Title 30, chapter 14, part 4, MCA, that have been properly marked, separated, and documented; (2) matters involving individual safety as determined by the State; (3) any company financial information requested by the State to determine vendor responsibility, unless prior written consent has been given by the offeror as set out in section 18-4-308, MCA; and (4) other constitutional protections. See Mont. Code Ann. § 18-4-304.

Procurement Officer Review of SOQ's

Upon opening the SOQ's received in response to this RFQ, the procurement officer in charge of the solicitation will review the SOQ's and separate out any information that meets the referenced exceptions in **Public Information Section** above, providing the following conditions have been met:

- Confidential information is clearly marked and separated from the rest of the SOQ.
- The SOQ does not contain confidential material in the cost or price section.
- An affidavit from an offeror's legal counsel attesting to and explaining the validity of the trade secret claim as set out in Title 30, chapter 14, part 4, MCA, is attached to each SOQ containing trade secrets. Counsel must use the State of Montana "Affidavit for Trade Secret Confidentiality" form in requesting the trade secret claim. This affidavit form is available on the General Services Division's website at:
<<http://www.discoveringmontana.com/doa/gsd/css/Resources/Forms.asp>> or by calling (406) 444-2575.

Information separated out under this process will be available for review only by the procurement officer, the evaluation committee members, and limited other designees. Offerors must be prepared to pay all legal costs and fees associated with defending a claim for confidentiality in the event of a "right to know" (open records) request from another party.